UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,543	06/10/2005	Loren Lantz	M-1107	3681
54964 7590 08/23/2007 TYCO HEALTHCARE - EDWARD S. JARMOLOWICZ 15 HAMPSHIRE STREET			EXAMINER	
			TOWA, RENE T	
MANSFIELD, MA 02048			ART UNIT	PAPER NUMBER
			3736	
			MAIL DATE	DELIVERY MODE
			08/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

· ·		·			
	Application No.	Applicant(s)			
	10/538,543	LANTZ ET AL.			
Office Action Summary	Examiner	Art Unit			
	Rene Towa	3736			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 09 M	a <u>y 2007</u> .				
2a) This action is FINAL . 2b) ⊠ This	☐ This action is FINAL . 2b) ☑ This action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.			
Disposition of Claims		•			
4) ⊠ Claim(s) 1-12 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-12 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or	vn from consideration.				
Application Papers					
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine	epted or b) objected to by the Eddrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). sected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
	,				
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate			

DETAILED ACTION

1. The Office action is responsive to an amendment filed May 9, 2007. Claims 1-12 are pending. Claims 1 & 10-12 are amended. No new claim has been added. Claims 13-20 are cancelled.

Specification

2. The objections are withdrawn due to amendments.

Claim Objections

3. The objection is withdrawn due to amendments.

Claim Rejections - 35 USC § 103

- 4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 5. Claims 1-2, 4-12 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sato (US Patent No. 3,738,173).

In regards to claim 1, Sato disclose(s) a tympanic thermometer comprising:

a heat sensing probe 11 defining a longitudinal axis and an outer surface extending from a distal end of the tympanic thermometer;

an ejection apparatus 13 including at least one finger 13c extending from the distal end of the tympanic thermometer and being capable of movement along the outer surface of the probe 11 toward a distal end of the probe 11; and

a probe cover 12 being mountable to the distal end of the tympanic thermometer, the mounted probe cover 12 defining an inner surface configured to engage the outer surface of the probe 11 and the mounted cover 12 conceals the at least one eject finger

13c and probe 11, the probe cover 12 including at least one proximal face projecting at the inner surface of the probe cover 11,

wherein the at least one finger 13c is movable toward the distal end of the probe 11, the at least one finger moving along the outer surface of the probe 11 and along the inner surface of the probe cover 12, and further the at least one finger is in contact with the at least one proximal face at the inner surface of the probe cover 12 until the probe cover 12 is released from the probe 11 (see figs. 4, 6 & 8-10; column 2/lines 30-48 & 51-57; column 3/lines 11-20; column 4/lines 45-56; column 5/lines 7-15; column 6/lines 34-38 & 55-64; column 7/lines 3-6, 30-38, 46-54 & 63-68).

It is noted that, in ejecting the probe cover, one can push down on the end cap 25 so that the fingers 13c strike the shoulder 12d of the probe cover 12 and thereby push off the probe cover 12.

In regards to claim 2, Sato disclose(s) a tympanic thermometer wherein the outer surface of the probe defines a groove 29, transversely oriented relative to the longitudinal axis, which is configured to receive a portion of the probe cover 12 for releasably retaining the probe cover 12 with the probe (see figs. 6 & 8; column 3/lines 11-20; column 5/lines 7-15; column 7/lines 3-6).

In regards to claim 5, Sato disclose(s) a tympanic thermometer wherein the at least one finger 13c includes a tapered finger tip defining a distal strike face 13a (see fig. 9).

Art Unit: 3736

In regards to claim 6, Sato disclose(s) a tympanic thermometer wherein the at least one finger 13c is movable between a retracted position (see fig. 9) and an extended position (see fig. 4).

In regards to claim 7, Sato disclose(s) a tympanic thermometer whereby the at least one finger 13c is biased to the extended position (see fig. 4; column 6/lines 55-64).

In regards to claim 8, Sato disclose(s) a tympanic thermometer whereby the at least one finger 13c is releasably fixable in a retracted position (see fig. 4; column 6/lines 55-64).

In regards to claim 9, Sato disclose(s) a tympanic thermometer wherein the at least one finger 13c is releasably fixable via a latch, whereby the latch includes a release button 15 that is engageable to release the at least one finger 13c from the retracted position (see fig. 9; column 7/lines 63-68).

In regards to claim 11, Sato disclose(s) a tympanic thermometer wherein the at least one longitudinal rib 12d has a transverse face having a substantially parallel orientation relative to the axis of the probe (see fig. 9).

Sato discloses a tympanic thermometer, as disclosed above, that fails to explicitly teach a plurality of fingers or longitudinal ribs.

Applying the factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) and are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.

Art Unit: 3736

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Regarding claim 1 (motivation to modify):

Sato discloses a tympanic thermometer comprising an ejection apparatus and a probe, substantially as claimed except that, *during ejection of the probe cover*, the ejection finger of Sato is stationary while the probe is movable; to the contrary, Applicant's ejection finger is movable while Applicant's probe is stationary; as such, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to provide an ejection mechanism similar to that of Sato with fingers for moving the probe cover, as claimed since such a modification would amount to a mere reversal of parts that has previously been held to be an obvious expedient--see *In re Gazda, 219 F. 2d 449, 452, 104 USPQ 400, 402 (CCPA 1955)*.

Regarding claims 4 & 10 (motivation to modify):

Since the totality of the plurality of fingers and/or longitudinal ribs would perform the same function as the singular finger of Sato, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to provide a thermometer similar to that of Sato with a plurality of fingers and/or longitudinal ribs, as claimed, since such a modification would amount to a design choice that would serve the same purpose as before. Moreover, it has previously been held that duplicating part (i.e. the fingers and/or ribs) for a multiple effect is not patentable--See *In re Harza*, 274 *F.2d* 669, 671, 124 USPQ 378, 380 (CCPA 1960).

Regarding claim 12 (motivation to modify):

Since the totality of the plurality of equidistantly spaced fingers and/or longitudinal ribs would perform the same function as the singular finger of Sato, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to provide a thermometer similar to that of Sato with a plurality of equidistantly spaced fingers and/or longitudinal ribs, as claimed, since such a modification would amount to a design choice that would serve the same purpose as before. Moreover, it has previously been held that duplicating part (i.e. the fingers and/or ribs) for a multiple effect is not patentable--See *In re Harza*, 274 F.2d 669, 671, 124 USPQ 378, 380 (CCPA 1960).

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato (173) in view of Makita et al. (US Patent No. 5,340,215).

Sato discloses a thermometer, as disclosed above, that teaches all the limitations of the claim except Sato does not disclose a plurality of protuberances projecting from the inner surface of the probe cover.

However, Makita et al. disclose a thermometer wherein the portion of the probe cover 9 includes a protuberance projecting from the inner surface of the probe cover 9 and being proximally spaced from the distal end of the probe cover (see figs. 2 & 6; column 4/lines 53-54 & 59-61).

Since Sato teaches a retaining means for releasably retaining the probe cover, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to provide a thermometer similar to that of Sato with a protuberance similar to that of Makita et al. in order to releasably attach the probe cover

to the probe. Moreover, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to provide a thermometer similar to that of Sato as modified by Makita et al. with a plurality of protuberances since such a modification would amount to a design choice. It has previously been held that duplicating part for a multiple effect is not patentable--See *In re Harza, 274 F.2d 669, 671, 124 USPQ 378, 380 (CCPA 1960)*.

7. Claims 1-12 are rejected under 35 U.S.C. 103(a) as obvious over Sato ('173) in view of Makita et al. (US Patent No. 5,340,215).

In regards to claim 1, Sato disclose(s) a tympanic thermometer comprising:

a heat sensing probe 11 defining a longitudinal axis and an outer surface

extending from a distal end of the tympanic thermometer;

an ejection apparatus 13 including at least one finger 13c extending from the distal end of the tympanic thermometer and being configured for movement along the outer surface of the probe 11 toward a distal end of the probe 11; and

a probe cover 12 being mountable to the distal end of the tympanic thermometer, the probe cover 12 defining an inner surface configured to engage the outer surface of the probe 11, the probe cover 12 including at least one longitudinal rib 12d radially projecting from the inner surface thereof, the longitudinal rib defining a proximal face to facilitate ejection of the probe cover 12,

wherein the at least one finger 13c is movable, to eject the probe cover 12, toward the distal end of the probe 11, along the outer surface of the probe 11 and within the probe cover 12, and further is in contact with the proximal face at the inner surface

Application/Control Number: 10/538,543

Art Unit: 3736

of the probe cover 12 until the probe cover 12 is released from the probe 11 (see figs. 4, 6 & 8-10; column 2/lines 30-48 & 51-57; column 3/lines 11-20; column 4/lines 45-56; column 5/lines 7-15; column 6/lines 34-38 & 55-64; column 7/lines 3-6, 30-38, 46-54 & 63-68).

It is noted that, in ejecting the probe cover, one can push down on the end cap 25 so that the fingers 13c strike the shoulder 12d of the probe cover 12 and thereby push off the probe cover 12.

In regards to claim 2, Sato disclose(s) a tympanic thermometer wherein the outer surface of the probe defines a groove 29, transversely oriented relative to the longitudinal axis, which is configured to receive a portion of the probe cover 12 for releasably retaining the probe cover 12 with the probe (see figs. 6 & 8; column 3/lines 11-20; column 5/lines 7-15; column 7/lines 3-6).

In regards to claim 5, Sato disclose(s) a tympanic thermometer wherein the at least one finger 13c includes a tapered finger tip defining a distal strike face 13a (see fig. 9).

In regards to claim 6, Sato disclose(s) a tympanic thermometer wherein the at least one finger 13c is movable between a retracted position (see fig. 9) and an extended position (see fig. 4).

In regards to claim 7, Sato disclose(s) a tympanic thermometer whereby the at least one finger 13c is biased to the extended position (see fig. 4; column 6/lines 55-64).

Art Unit: 3736

In regards to claim 8, Sato disclose(s) a tympanic thermometer whereby the at least one finger 13c is releasably fixable in a retracted position (see fig. 4; column 6/lines 55-64).

In regards to claim 9, Sato disclose(s) a tympanic thermometer wherein the at least one finger 13c is releasably fixable via a latch, whereby the latch includes a release button 15 that is engageable to release the at least one finger 13c from the retracted position (see fig. 9; column 7/lines 63-68).

In regards to claim 11, Sato disclose(s) a tympanic thermometer wherein the at least one longitudinal rib 12d has a transverse face having a substantially parallel orientation relative to the axis of the probe (see fig. 9).

Sato discloses a tympanic thermometer, as disclosed above, that fails to explicitly teach a plurality of fingers, longitudinal ribs, protuberances or fingers for ejecting the probe cover.

However, Makita et al. disclose a thermometer wherein the portion of the probe cover 9 includes a protuberance projecting from the inner surface of the probe cover 9 and being proximally spaced from the distal end of the probe cover; wherein fingers 7 are configured for ejecting the probe cover 9 (see figs. 2 & 4-6; column 4/lines 53-54 & 59-61; column 5/lines 1-15).

Applying the factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) and are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.

Art Unit: 3736

3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Regarding claim 1 (motivation to combine):

Since both Sato and Makita et al. disclose thermometers comprising a probe and an ejection mechanism including at least one finger, and Makita et al. further teach that it is known to provide thermometers with fingers that eject the probe, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to provide a thermometer similar to that of Sato with fingers that eject the probe cover as taught by Makita et al. in order to eject the probe cover from the probe (see Makita et al., column 5/lines 1-15).

Regarding claim 3 (motivation to combine):

Since Sato teaches a retaining means for releasably retaining the probe cover and Makita et al. teach a protuberance as the retaining means for releasably retaining the probe cover, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to provide a thermometer similar to that of Sato with a protuberance similar to that of Makita et al. in order to releasably attach the probe cover to the probe. Moreover, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to provide a thermometer similar to that of Sato as modified by Makita et al. with a plurality of protuberances since such a modification would amount to a design choice. It has previously been held that duplicating part for a multiple effect is not patentable---See *In re Harza, 274 F.2d 669, 671, 124 USPQ 378, 380 (CCPA 1960)*.

Art Unit: 3736

Regarding claims 4 & 10 (motivation to modify):

Since the totality of the plurality of fingers and/or longitudinal ribs would perform the same function as the singular finger of Sato and/or Makita et al., it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to provide a thermometer similar to that of Sato as modified by Makita et al. with a plurality of fingers and/or longitudinal ribs, as claimed, since such a modification would amount to a design choice that would serve the same purpose as before. Moreover, it has previously been held that duplicating part (i.e. the fingers and/or ribs) for a multiple effect is not patentable--See *In re Harza*, 274 F.2d 669, 671, 124 USPQ 378, 380 (CCPA 1960).

Regarding claim 12 (motivation to modify):

Since the totality of the plurality of equidistantly spaced fingers and/or longitudinal ribs would perform the same function as the singular finger of Sato and/or Makita et al., it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to provide a thermometer similar to that of Sato as modified by Makita et al. with a plurality of equidistantly spaced fingers and/or longitudinal ribs, as claimed, since such a modification would amount to a design choice that would serve the same purpose as before. Moreover, it has previously been held that duplicating part (i.e. the fingers and/or ribs) for a multiple effect is not patentable—See *In re Harza, 274 F.2d 669, 671, 124 USPQ 378, 380 (CCPA 1960)*.

Response to Arguments

Art Unit: 3736

8. Applicant's arguments filed May 9, 2007 have been fully considered but they are moot in view of the new grounds of rejection.

9. The Affidavit filed on May 9, 2007 under 37 CFR 1.131 is sufficient to overcome the 102 rejection over the Sato reference.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rene Towa whose telephone number is (571) 272-8758. The examiner can normally be reached on M-F, 8:00-16:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (571) 272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/538,543

Art Unit: 3736

/RTT/

Page 13

AN F. I INDENBURG FOLHY PATENT EXAMINER